Amendments to the Claims:

Please amend claim 5 as follows. This listing of claims will replace all prior versions,
and listings, of claims in the application.

1. (original)   A method of segmenting a three-dimensional structure from a three-
dimensional, and in particular medical, data set while making allowance for user corrections,
having the following steps:

a)   provision of a three-dimensional deformable model (M) whose surface is formed
by a network of mashes that connect nodes at the surface of the model,

b)   positioning of the model (M) at a point in a three-dimensional data set at which
the structure (6) to be segmented is situated,

c)   manual displacement of nodes,

d)   re-calculation of the nodes of the model (M) in weighted consideration of the
nodes that have been displaced manually.

2. (original) A method as claimed in claim 1, wherein step d) comprises the
following steps:

determination of a candidate point for each sub-surface defined by mashes of the
model, each candidate point being situated on a normal to the sub-surface,

assignment of a weighting factor to each node that has been displaced, the weighting
factor being larger the smaller distance between the displaced node and a boundary surface
of the structure to be segmented,

re-calculation of the nodes of the model while allowing for the candidate points
determined, the displaced nodes, and the weighting factors assigned.

3. (original) A method as claimed in claim 1, characterized in that step d) the nodes

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are re-calculated by minimizing a weighted sum of external energy, internal energy and an energy that takes into account the manually displaced nodes.

4.   (original) An image-processing arrangement for performing the method claimed in claim 1, comprising:

a memory unit for storing a deformable model whose surface is formed by a network of mashes that connect the nodes at the surface of the model, and for storing a three-dimensional data set and in particular a medical data set,

an image-reproduction unit for reproducing a structure to be segmented and the deformable model,

a calculating unit for re-calculating the nodes of the model in weighted consideration of nodes which have been displaced manually,

a positioning unit for positioning the model at the point in the three-dimensional data set at which the structure to be segmented is situated,

a control unit for controlling the memory unit, the image-reproduction unit, the calculating unit and the positioning unit to perform the following steps:

a) provision of a three-dimensional deformable model (M) whose surface is formed by a network of mashes that connect nodes at the surface of the model,

b) positioning of the model (M) at a point in a three-dimensional data set at which the structure (6) to be segmented is situated,

c) manual displacement of nodes,

d) re-calculation of the nodes of the model (M) in weighted consideration of the nodes that have been displaced manually.

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5.   (currently amended) A computer program for a control unit for controlling a

memory unit, an image-reproduction unit, a calculating unit and a positioning unit of an

image-processing arrangement, wherein the program is embedded in a computer-readable

medium, for ~~performing the method~~ controlling the image-processing arrangement as

claimed in Claim ~~1~~ 4 according to the following steps:

a)   provision of a three-dimensional deformable model (M) whose surface is formed

by a network of mashes that connect nodes at the surface of the model,

b)   positioning of the model (M) at a point in a three-dimensional data set at which

the structure (6) to be segmented is situated,

c)   manual displacement of nodes,

d)   re-calculation of the nodes of the model (M) in weighted consideration of the

nodes that have been displaced manually.